Claims

1. A method comprising the steps of:

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directing a call intended for a mobile to a virtual tandem switch;

querying, by the virtual tandem switch, a home location register to obtain call information for the mobile;

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setting up the call to the mobile over a packet-based transport network.

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2. The method of claim 1, further comprising the step of converting at least part of the call between a packet-based protocol for transport over the packet-based transport network and a non-packet-based protocol.

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3. The method of claim 2, wherein the non-packet-based protocol is a time division multiplexed protocol.

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4. The method of claim 1, wherein the call is directed to the mobile while the mobile is roaming form its home service area.

5. A switch comprising:

a first converter arranged and constructed to convert control messages between a packet-based protocol and a first protocol, wherein the first converter is located at a first geographic location;

a second converter arranged and constructed to convert voice messages between a packet-based protocol and a first protocol, wherein the second converter is located at the first geographic location;

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a third converter arranged and constructed to convert control messages between a packet-based protocol and a second protocol, wherein the third converter is located at a second geographic location;

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a fourth converter arranged and constructed to convert voice messages between a packet-based protocol and a second protocol, wherein the fourth converter is located at the second geographic location;

such that the switch provides a gateway between the public switched telephone network and a wireless network.

6. The switch of claim 5, wherein the first protocol is an ISDN User Part signalling protocol and the second protocol is a time division multiplexed protocol.

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- 7. The switch of claim 5, further comprising a network feature server, arranged and constructed to provide network routing between the converters.
- 10 8. The switch of claim 5, further comprising a switch management system, arranged and constructed to provide operation, administration, and provisioning of the converters of the switch.